

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	TILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,477	-	04/20/2001	Lorin R. Debonte	07148-094001 / A15-502	2474
26191	7590	06/03/2003			-
FISH & RICHARDSON P.C. 3300 DAIN RAUSCHER PLAZA 60 SOUTH SIXTH STREET			EX		AMINER
				MCELWAIN, ELIZ	
MINNEAPOLIS, MN 55402		55402		ART UNIT	PAPER NUMBER
			1638 DATE MAILED: 06/03/2003	9	

Please find below and/or attached an Office communication concerning this application or proceeding.

			Application No.	ion No. Applicant(s)				
		Office Action Summary	09/839,477	DEBONTE ET AL.				
	ome Action Summary		Examiner	Art Unit				
		- The MAILING DATE of this comme is at	Elizabeth F. McElwain	1638				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
	A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any  Status							
	1)🖂	Responsive to communication(s) filed on 04 M	larch 2003 .					
	2a)⊠	<b>—.</b> .	s action is non-final.					
	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims							
	4)⊠ Claim(s) <u>1-12,19-23 and 31-35</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
	5) Claim(s) is/are allowed.							
	6)⊠ Claim(s) <u>1-12,19-23 and 31-35</u> is/are rejected.							
	7) Claim(s) is/are objected to.							
	8) Claim(s) are subject to restriction and/or election requirement.							
1		on Papers						
	9) The specification is objected to by the Examiner.							
	10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CED 4 85(a)								
is: a) approved b) disapproved by the Examiner.								
ii approved, corrected drawings are required in reply to this Office action.								
12) The oath or declaration is objected to by the Examiner.								
Priority under 35 U.S.C. §§ 119 and 120								
	اردا	cknowledgment is made of a claim for foreign p	riority under 35 U.S.C. § 119(a)-(	(d) or (f).				
	a) All b) Some * c) None of:							
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.							
	14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
	a) 🔲 The translation of the foreign language provisional application has been required							
٨٠	15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  Attachment(s)							
''								
2) 3)	☐ Notice o	f References Cited (PTO-892)  f Draftsperson's Patent Drawing Review (PTO-948)  ion Disclosure Statement(s) (PTO-1449) Paper No(s)		TO-413) Paper No(s) ent Application (PTO-152)				
	Patent and Trade 0-326 (Rev. 0							

Serial No. 09/839,477

Art Unit 1638

The amendment filed March 4, 2003 has been entered.

Claims 2, 17, 33 and 34 are newly submitted.

Claims 13-16, 18, 24-30 and 36-39 have been cancelled.

Claims 1-12, 17, 19-23 and 31-35 are pending and are examined.

Rejections that have not been restated have been withdrawn.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-12, 17, 19-23 and 31-35 are rejected under 35 U.S.C. 103(a) as being obvious

5

10

15

20

Claims 1-12, 17, 19-23 and 31-35 are rejected under 35 U.S.C. 103(a) as being obvious over Ohlrogge et al (U.S. Patent 5,925,805) taken with Shorrosh et al (PNAS 91:4323-4327, May 1994) and in view of Gegenbach et al (U.S. Patent 5,498,544), as stated in the last office action for claims 1-39.

Applicant's arguments filed March 4, 2003 have been fully considered but they are not persuasive.

Applicants argue that the rejection is improper given that one would not expect that a statistically significant increase in oil content could be achieved in a plant in the absence of a transit peptide directing the ACCase polypeptide into the plastid, given that fatty acid synthesis occurs in the plastid. In addition, Applicants state that Ohlrogge et al disclose only a 5% increase in oil content in seeds from plants transgenic for an ACCase construct containing a transit peptide. Therefore, applicants assert that one of ordinary skill in the art would not have had a

5

10

15

20

reasonable expectation of success and it would not have been obvious to one of ordinary skill in the art that a significant increase of 5% to 25% could be reached using an ACCase construct that lacks a transit peptide. Applicants further state that while Gegenbach et al disclose that a transit peptide is optional in a construct expressing an ACCase sequence and they predict a broad range of oil content for plants transformed with said construct, that Gegenbach et al do not exemplify a plant or method of making a plant with a high oil content. Thus, applicants argue that the rejection is based on an "obvious to try" standard. In addition, applicants assert that the predictions of Gegenbach are not in agreement with the results of Ohlrogge et al, and the cited references, in combination, do not provide a reasonable expectation of success of producing plants that exhibit a 5% to 25% increase in oil content using an ACCase construct lacking a transit peptide.

The Examiner maintains the rejection given that at page 19, lines 12-13 of the specification it is disclosed that plants transformed with the -7ACCase construct (the full length ACCase coding sequence without a transit peptide) had fatty acid compositions that were not significantly different from the fatty acid profile of the Westar background variety. Only after many rounds of selection for increased oil was higher oil obtained. In addition, the only example provided is Brassica napus having an improved oil content after seven generations, wherein each subsequent generation was produced from the plants exhibiting the highest oil content.

Therefore, it would have been obvious to use the teachings of the cited references in combination to practice the claimed invention, in the absence of evidence to the contrary. In addition, an

Serial No. 09/839,477 Art Unit 1638

-4-

increase of 5% is within the limits of 5% to 25% that is claimed, and the evidence for nonobviousness should be commensurate with the scope of the claims.

No claims are allowed.

5

10

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

20

25

15

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth F. McElwain whose telephone number is (703) 308-1794. The examiner can normally be reached on Monday through Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached at (703) 306-3218. The fax phone number for this Group is (703) 308-4242. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989).

Serial No. 09/839,477 Art Unit 1638

-5-

Any inquiry of a general nature or relating to the status of this application should be directed to the CUSTOMER SERVICE TECH CENTER 1600, whose telephone number is (703) 308-0198, or to the Group receptionist whose telephone number is (703) 308-0196.

5 Elizabeth F. McElwain, Ph.D. May 30, 2003

ELIZABETH F. MCELWAIN PRIMARY EXAMINER GROUP 1800